Teachers Urged to Mix it Up and Use Novelty to Engage Students

By Caralee Adams on November 16, 2013 7:37 PM

Boston

Crank up the music. Move around. Take time to chat. Throw in some humor.

Not the typical advice for how to run a classroom, but experts in brain science say these ideas can engage students and spur learning.

Students thrive in a rich classroom environment when every 8 to 10 minutes the teacher mixes up the activities. After introducing an idea, have students turn and talk with their neighbor about the concept. Or, better yet, have them walk 20 steps, freeze, and then chat in a group of three. Play some music to energize the room and fill the silence that might otherwise keep students from opening up.

This not only makes school more fun, it's rooted in science. The brain loves novelty and when new strategies are used to convey information, it is more receptive to learning.

"To engage students, you have to engage their brains," said John Almarode, an assistant professor in the College of Education at James Madison University, speaking at the **Learning and the Brain** conference Friday in Boston.

In a session for educators about creating a positive classroom environment that bathes the brain in dopamine (the feel-good chemical), Almarode modeled the strategies.

"Take out your imaginary cameras. Click a photo of the person next to you and say: 'Lookin' good!'" he instructed after small-group discussion, triggering smiles throughout the room.

If teachers are enthusiastic, that excitement can spill over to the students. Tee up a lesson with a provocative question or something that relates to students' lives and they are more apt to tune in. "Once the student is on board and ready to learn, the brain is active," said Almarode.

Go from the concrete to the abstract. For instance, don't start a lesson on photosynthesis with a lecture. Instead, have a lab where students get to do hands-on work with plants to spark their interest and then explain the details of the science, suggested Almarode, author of *Captivate, Activate, and Invigorate the Student Brain in Science and Math, Grades 6-12* (2013).

The key is to engage kids emotionally, behaviorally and cognitively, advocates Almarode. "You have to create a classroom where the emotional climate is warm, welcoming, and safe—and students are expected to succeed, because we tell them they can," he said.

Throughout his presentation, Almarode had the group repeat key phrases and raise their arms and wiggle their fingers to demonstrate brain functions.

For information to stick, students need to time to absorb it, reflect, and talk about it. "You only remember what you think about," he said.

"What's that?" The audience responded in unison: "You only remember what you think about."

The brain is designed to forget, so repetition is important in learning, he said. Knowledge can be solidified if students teach new concepts to one another. Students will think more if teachers have a presentation with blanks in a sentence that need to be filled in, rather than providing all the information up front, Almarode said.

These strategies might make for some disruption, noise, and turning over teacher control, but Almarode insists it's worth the effort. It's best to start by weaving one or two ideas into your classroom each week.

A participant, Jane Ford, a high school administrator and teacher from Ontario, said attending the session confirmed that her school is on the right track with a new program that promotes physical activity in the classroom. She plans to share the ideas about repetition and teaching in shorter segments with her colleagues, but said change can be hard. "Nobody likes change. You have to engage in it and be a facilitator of it," said Ford to me in an interview afterwards.

Adding humor and novelty to the classroom prepares students for learning, said another session participant, Mary Tully Alarcon, assistant principal at the K-8 Osmond Church School in New York City. "It's the little things that set a good emotional tone," she said. "If the students are predisposed to something, that's half the battle."

Engaging students can lead to better levels of college-readiness. But, unfortunately, the level of engagement tends to disappear as students

move up and into college, added Alarcon.

The switch from interactive classrooms to straight lectures can be part of the reason why the transition from high school to college is so tough, said Almarode. After having their lessons scaffolded, in college, students often are thrown in the deep end and told: "Good luck," he said.

"College professors don't get it because they are so content driven," said Almarode. "They don't pay as much attention [to engagement strategies], but they could benefit from ideas used in K-12."

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